Michigan Department of Community Health

MDCH

Jennifer M. Granholm, Governor
Janet Olszewski, Director

Facts About Lung Cancer

February 2007

What You Should Know

- Lung cancer is the leading cause of cancer-related death in Michigan and in the United States.[1,2]
- Lung cancer is the second most frequently diagnosed cancer in Michigan, behind only prostate cancer.[3]
- Michigan ranks 21st in the nation in lung cancer mortality.[4]
- Based on randomized controlled trials, screening for lung cancer with chest X-ray or sputum cytology has not been found to result in a reduction in lung cancer mortality.[5]

Risk Factors

- Smoking is the leading risk factor for lung cancer. More than 95 percent of lung cancers that occur among current smokers were found to be a result of smoking.[5]
- If overall adult smoking prevalence in Michigan is reduced by 42 percent and adult per capita consumption in the state is reduced by 25 percent, the Michigan Cancer Consortium (MCC) estimates that 1,100 lung cancer deaths will be prevented annually among Michigan adults.
- Assuming that 80% of person-years of life lost and health care costs incurred associated with lung cancer are attributable to smoking, it is projected that if the overall adult smoking prevalence in Michigan is reduced by 42% this will result in a total BCBSM cost savings of nearly 15 million dollars (2003: $44,245,175 vs. Projected: $29,378,796) along with a reduction of nearly 30,000 person-years of life lost (2003: 88,476 vs. Projected: 58,748).[1,6]
- If the proportion of Michigan youth grades 9-12 who report smoking cigarettes during the past 30 days is reduced to 16 percent, it is estimated that 14,192 (life time effect) premature deaths due to smoking-related causes, including lung cancer, will be prevented.
- Nonsmokers who breathe second-hand smoke also have an increased risk of developing lung cancer. Non-smoking spouses of smokers have a 30 percent greater risk of developing lung cancer than spouses of non-smokers.[7]
- Other factors that increase an individual's risk of developing lung cancer include increasing age, a personal history of lung cancer, and exposure to asbestos or other specific cancer-causing agents in the workplace or the environment.[7]
- In Michigan, more than 27 percent of individuals diagnosed with lung cancer in 2003 were between the ages of 50 and 64. Approximately 66 percent were 65 years of age or older.[3]

Incidence and Mortality

- During 2003, a total of 7,636 men and women in Michigan were diagnosed with lung cancer.[3]
- During 2004, a total of 5,822 men and women in Michigan died of lung cancer.[1]
- During 2004, more Michigan women died from lung cancer than from breast cancer (2,534 vs. 1,417).[1]
- In Michigan, the incidence of lung cancer has declined over the past 10 years. It still exceeds the national incidence rates.[2,3]

Stage at Diagnosis

- During 2003, 17.4 percent of lung cancer cases diagnosed in Michigan were found at a local stage.[3]
- Although survival is increased when lung cancer is detected and treated early, most cases of lung cancer are diagnosed after it has spread to the lymph nodes and other organs. The five-year survival rate for all stages of lung cancer combined is 15 percent.[2]

Risk Behaviors

- Approximately 25 percent of Michigan men and 22 percent of Michigan women smoke cigarettes, significantly increasing their risk of developing lung cancer.[8]
-

Michigan residents more likely to smoke are those with lower household incomes, lower education levels, and younger ages.[8]

- Smoking begins at an early age in Michigan. Seventeen percent of Michigan high school students report smoking one or more days in the previous month, while 7.8 percent report frequent smoking (more than 20 of the previous 30 days). Fifty-seven percent of high school students who currently smoke have tried unsuccessfully to quit.[9]

References:

1. MDCH Vital Records & Health Data Development Section, 1985-2004 Michigan Resident Death Files
2. SEER Cancer Statistics Review, 1975-2003 National Cancer Institute, Bethesda, MD
3. MDCH Vital Records & Health Data Development Section, 1985-2003 Michigan Cancer Incidence File
4. NCI State Cancer Profiles
5. Cancer Prevention Study II, from Changes in Cigarette-Related Disease Risks and Their Implication for Prevention and Control, National Cancer Institute, NIH publication no. 97-4213, 1997
6. Blue Cross Blue Shield of Michigan, Center for Healthcare Quality; and Blue Care Network of Michigan.
7. American Cancer Society
8. Michigan Behavioral Risk Factor Surveillance System, 2004 Data
9. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance -United States, 2005. Surveillance Summaries, June 9, 2006. MMWR 2006;55(No. SS-5).